

Landside-Aware Air Traffic Management, Phase I

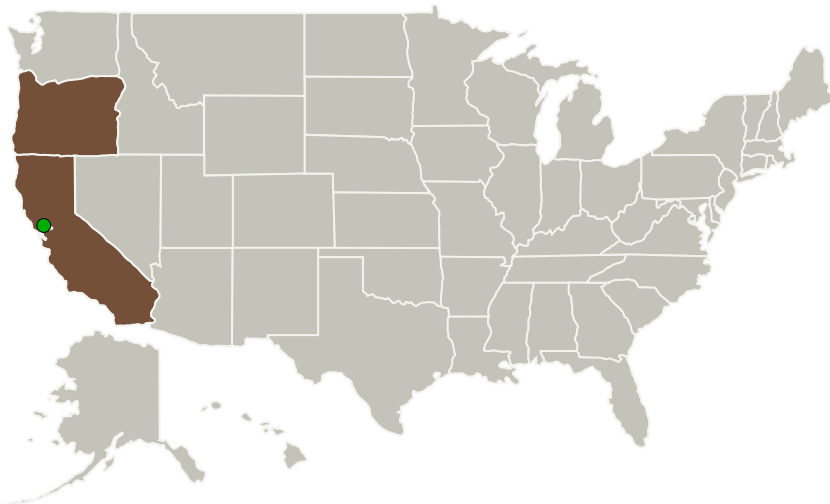
Completed Technology Project (2016 - 2016)



Project Introduction

We focus on the passenger as the key stakeholder of the Air Traffic Management (ATM) system. Air transport is only a portion of the passenger door-to-door journey, which also relies on other modes of transportation (a taxi ride, bus ride, drive over the freeways, rail, or other) to complete the journey. Transportation modes are usually studied separately as if not interacting, although they are intrinsically coupled through passenger transfers; in fact, the failure of one mode disrupts the entire passenger journey. In this effort, we gather specific passenger location data from individual passengers and aggregate data on passengers, both airside (within the terminal) and landside (within the airport and outside the airport) to build a better estimate for the expected time of departure for an aircraft at an airport gate. The system is composed of multiple technologies that either access specific data or aggregate data of passengers. A "push" technology is used to shape passenger behavior by informing the passenger about security delays, traffic delays, and other information that could encourage the passenger to be on time to the departure gate.

Primary U.S. Work Locations and Key Partners



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Organizations Performing Work	Role	Type	Location
The Innovation Laboratory, Inc.	Lead Organization	Industry Women-Owned Small Business (WOSB)	Portland, Oregon
● Ames Research Center(ARC)	Supporting Organization	NASA Center	Moffett Field, California

Primary U.S. Work Locations

California	Oregon
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Project Transitions

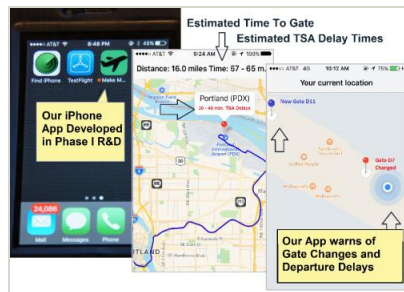
**June 2016:** Project Start**December 2016:** Closed out**Closeout Documentation:**

- Final Summary Chart(<https://techport.nasa.gov/file/139947>)

Images

**Briefing Chart Image**

Landside-Aware Air Traffic Management, Phase I
(<https://techport.nasa.gov/image/128344>)

**Final Summary Chart Image**

Landside-Aware Air Traffic Management, Phase I Project Image
(<https://techport.nasa.gov/image/128583>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

The Innovation Laboratory, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

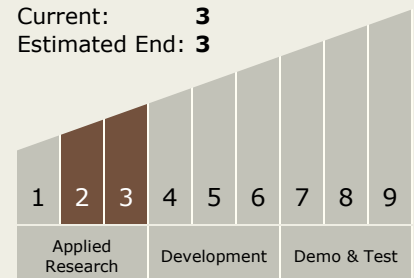
Carlos Torrez

Principal Investigator:

Jimmy Krozel

Technology Maturity (TRL)

Start: 2
Current: 3
Estimated End: 3



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Technology Areas

Primary:

- TX01 Propulsion Systems
 - └ TX01.3 Aero Propulsion
 - └ TX01.3.1 Integrated Systems and Ancillary Technologies

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System